

COMMITTEE REPORT

TO: CHAIR AND MEMBERS FINANCIAL MANAGEMENT COMMITTEE **DATE:** 2021 February 26

FROM: DIRECTOR ENGINEERING **FILE:** 32000-05

SUBJECT: **2021 MARCH ENGINEERING CAPITAL INFRASTRUCTURE BYLAW FUNDING REQUEST**

PURPOSE: To request the use of Waterworks Utility and Sanitary Sewer Fund Capital Reserves and to request a Capital Reserve Fund Bylaw to finance 2021 - 2022 Engineering capital infrastructure projects.

RECOMMENDATION:

1. **THAT** the Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserve Fund Bylaw in the amount of \$10,882,000, the use of Sanitary Sewer Fund Capital Reserves in the amount of \$600,000 and the use of Waterworks Utility Capital Reserves in the amount of \$6,552,500 to finance Engineering capital infrastructure improvement projects, as outlined in this report.

REPORT**INTRODUCTION**

The 2021 – 2025 Annual Financial Plan will provide funding for various multi-year capital improvement projects. In order to proceed with design and construction, funding approval is requested for the projects listed below.

POLICY SECTION

The following projects are aligned with the City of Burnaby's Corporate Strategic Plan by supporting the following goals and sub-goals of the Plan.

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 From: Director Engineering
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Goal

- A Safe Community
 - Transportation safety –
 Make City streets, pathways, trails and sidewalks safer.

- A Dynamic Community
 - City Facilities and infrastructure –
 Build and maintain infrastructure that meets the needs of our growing community.

- A Thriving Organization
 - Reliable services, technology and information –
 Protect the integrity and security of City information, services and assets.

1.0 Infrastructure

1.1 Marine Drive Upgrade

Estimated \$6,720,000

A conceptual design has been completed for Marine Drive from Boundary Road to Patterson Avenue and from Sussex Avenue to Byrne Road. The conceptual design will provide geometrics for the ultimate road upgrade to provide curb, gutter, sidewalks and utilities. Intersection improvements including geometry and signalization will be part of this project. The City is initiating detailed civil design for the first phase, which is Marine Drive, between Boundary Road and Greenall Avenue.

This project will bring the street to the urban street standard, including multi-use path along the north side of the street, sidewalk along the south side of the street, roadway including curb and gutter, retaining walls, new bus bays, street lighting, parking accommodations, storm sewer upgrades, sanitary service upgrades, and water main upgrades. The goal of this project is to improve traffic operations, accessibility and safety for all users.

Project Mask	2021	2022	Total
EMC.3040 – Roads	\$1,500,000	\$4,000,000	\$5,500,000
EJA.3040 – Water	\$420,000	\$500,000	\$920,000
EKA.3040 – Sewer	\$300,000	-	\$300,000
Total	\$2,220,000	\$4,500,000	\$6,720,000

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1.2 Imperial and Patterson Left Turn Bays

Estimated \$1,000,000

To improve traffic flow and safety, intersection improvements at Imperial Street and Patterson Avenue involving the addition of eastbound and westbound left turn bays are required.

This project involves roadworks and traffic signalization work to provide the left turn bays and to upgrade the signals with traffic cameras. Synchro analysis has been completed by the City and the geometric design by the city consultant is completed.

The Engineering Department and the Parks Department have been working together to ensure that both the Central Park Trail Phase 2 Project and this intersection improvement project will impact as few trees as possible. The Central Park Trail (Phase 2) will be setback from this intersection improvement. Sidewalks will be provided to the proposed bus stop and the intersection. Size of the left turn bays have been significantly reduced to minimize tree impacts.

Translink funding will be available for cost reimbursement upon project completion.

Project Mask	2021
EMC.3035 – Roads	\$1,000,000

1.3 Burnaby Mountain Booster Upgrades

Estimated \$95,000

This project consists of upgrades to the existing Burnaby Mountain Booster to accommodate increased demand from growth and development on Burnaby Mountain. Upgrades to the existing station are anticipated to include design and installation of a new pump, motor, associated piping, controls, communications and re-programming.

Funding of \$875,000 has been raised previously. This request for \$95,000 is to accommodate expected change orders related to the fabrication of the pumps and the close out of the project.

Project Mask	2021
EJA.3167	\$95,000

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1.4 Sunset Pressure Reducing Valve

Estimated \$1,600,000

This project is for the design and upgrade of the existing Sunset pressure reducing valve, located at Sunset Street and Boundary Road, as part of the City’s ongoing infrastructure renewal program. This includes replacement of the existing CI feeder main, services and road rehabilitation along Sunset Street, near to the new PRV.

Project Mask	2021	2022	Total
EJA.3168 – Water	\$600,000	\$1,000,000	\$1,600,000

1.5 Wright Street Watermain and Road Upgrades

Estimated \$932,000

This watermain and roads package consists of project sites in the Cariboo-Armstrong neighbourhood of Burnaby. The project involves replacement of existing aged watermains, hydrants and services, a limited section of new storm and sanitary sewers separation complete with pavement rehabilitation and/or upgrade to local/collector streets. This project is intended for design by an engineering consultant and construction by City forces with a separate tender for roadworks.

Funding is being requested to enable City Forces to start the replacement of the sewers and roads portion of the project. Funding request for the watermains portion was undertaken in the February 2021 FMC report.

Included in Appendix A is a detailed list of proposed locations.

Project Mask	2021	2022	Total
EKA.3194 – Sewer	\$150,000	\$150,000	\$300,000
EMC.3194 – Roads	\$132,000	\$500,000	\$632,000
Total	\$282,000	\$650,000	\$932,000

1.6 Kincaid Street Watermain and Roadworks

Estimated \$5,090,000

This project is for the construction of new 150mm and 250mm mains along Douglas Road (Woodsworth Street to Canada Way) to facilitate expansion of the Kincaid Zone into the Central Valley Zone. It will transfer existing services fronting Douglas Road to a new 150mm main (Kincaid Zone). It will also ‘close’ the existing valve at Woodsworth Street and Douglas Road, to complete the zone boundary change.

Project Mask	2021	2022	Total
EJA.3239 - Water	\$340,000	\$1,500,000	\$1,840,000
EMC.3239 - Roads	\$450,000	\$2,800,000	\$3,250,000
Total	\$790,000	\$4,300,000	\$5,090,000

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1.7 Kincaid and Royal Oak Pressure Reducing Valves Estimated \$960,000

As part of the City’s ongoing infrastructure pressure reducing valves renewal program (PRV), the City will investigate, design, construct and commission replacements for the existing Royal Oak PRV (Royal Oak Avenue and Portland Street) and Kincaid PRV (Kincaid Street, west of Canada Way).

Project Mask	2021
EJA.3240 – Water	\$960,000

1.8 Capitol Hill Watermain and Road Upgrades Estimated \$737,500

This watermain and road package consists of project sites in the Capitol Hill, North Burnaby area. The projects involve replacement of existing aged watermains, hydrants and services, a limited section of new storm sewer, additional street lighting, multi-use path, complete with pavement rehabilitation and/or upgrade on local/collector streets. This project is intended for design by an engineering consultant, watermain construction by City forces, and a separate tender for contract services of roadworks and street lighting improvements.

Included in Appendix A is a detailed list of proposed locations.

Project Mask	2021
EJA.3218 – Water	\$637,500
EMC.3218 – Roads	\$100,000
Total	\$737,500

1.9 Local Area Services Program Estimated \$400,000

This project is for the design and construction of Local Area Service Program (LASP) works as approved by Council. LASP projects are initiated by property owners through a petition process and are constructed through cost-sharing between property owners and the City. Terms of the cost-sharing were established through the *Local Improvement Charges Bylaw*.

LASP projects range from full street upgrades, sidewalk installations, streetlight installations, traffic calming measures (such as speed humps), and street tree planting or replacements. Water, sanitary sewer, storm sewer, and civic communications funds where they apply are allocated to coordinated works required as part of the projects.

Project Mask	2021	2022	Total
ECA.3217 – LASP	\$100,000	\$300,000	\$400,000

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1.10 Griffiths Watermains and Roads

Estimated \$500,000

This project involves replacement of existing watermains due to deteriorated conditioning. Rehabilitative roadworks will also be undertaken, with the addition of upgrades to Halligan Street, new sidewalks along Burns Street, Bryant Street and Halligan Street, a proper cul-de-sac at Griffiths Avenue and a pathway at Bryant Court. Replacement of the watermain on McBride Street will involve a new tie-in onto Griffiths Avenue through a new ROW agreement with BC Hydro, at #6908 Imperial Street. If this ROW can't be negotiated, then it is also possible to extend the main on Keyes Avenue and Imperial Street.

Project Mask	2021	2022	Total
EJA.3230 – Water	\$100,000	\$400,000	\$500,000

Included in Appendix A is a detailed list of proposed locations.

These expenditures will be included in the 2021 – 2025 Annual Financial Plan and sufficient Capital Reserves and Reserve Funds are available to finance the capital projects outlined in this report.

RECOMMENDATION

It is recommended that the Financial Management Committee recommend Council authorize the City Solicitor to bring forward a Capital Reserve Fund Bylaw in the amount of \$10,882,000, the use of Sanitary Sewer Fund Capital Reserves in the amount of \$600,000 and the use of Waterworks Utility Capital Reserves in the amount of \$6,552,500 to finance Engineering capital infrastructure improvement projects, as outlined in this report.



Leon A. Gous, P.Eng., MBA
 DIRECTOR ENGINEERING

AA/RS/ac

Copied to: Acting City Manager
 Director Finance
 City Solicitor
 Deputy Director Engineering
 Assistant Director Infrastructure & Development
 Manager, Engineering Projects

Appendix A

Project: Wright Street Watermain and Road Upgrades (Section 1.5)

Construction is being planned at the following locations:

Street	From	To
17 th Avenue	Newcombe Street	Cumberland Street
14 th Avenue	Newcombe Street	Cumberland Street
Wright Street	17 th Avenue	13 th Avenue
Newcombe Street	17 th Avenue	13 th Avenue

Project: Capitol Hill Watermain and Road Upgrades (Section 1.8)

Construction is being planned at the following locations:

Street	From	To
Stratford Avenue	Pandora Street	Hastings Street
Pandora Street	Warwick Avenue	Fell Avenue
Frances Street	Holdom Avenue	Fell Avenue

Project: Griffiths Watermains and Roads (Section 1.10)

Construction is being planned at the following locations:

Street	From	To
Griffiths Avenue	McBride Street	Stanley Street
Burns Street	Sperling Avenue	Griffiths Avenue
Bryant Court	Griffiths Avenue	end
Halligan Street	Griffiths Avenue	Walker Avenue
McBride Street	Griffiths Avenue	Walker Avenue